MONTANA SAGE GROUSE
Habitat Conservation Program

MONTANA SAGE GROUSE CONSERVATION STRATEGY

MONTANA SAGE GROUSE CONSERVATION STRATEGY GOALS

- Maintain viable sage grouse populations and conserve habitat.
- Maintain flexibility to manage our own lands, our wildlife, and our economy.

MONTANA CONSERVATION STRATEGY HAS THREE PILLARS

1. Private Land Stewardship
2. Executive Order 12-2015
3. Montana Greater Sage Grouse Stewardship Act
    - Stewardship Fund Grants
    - Mitigation Marketplace

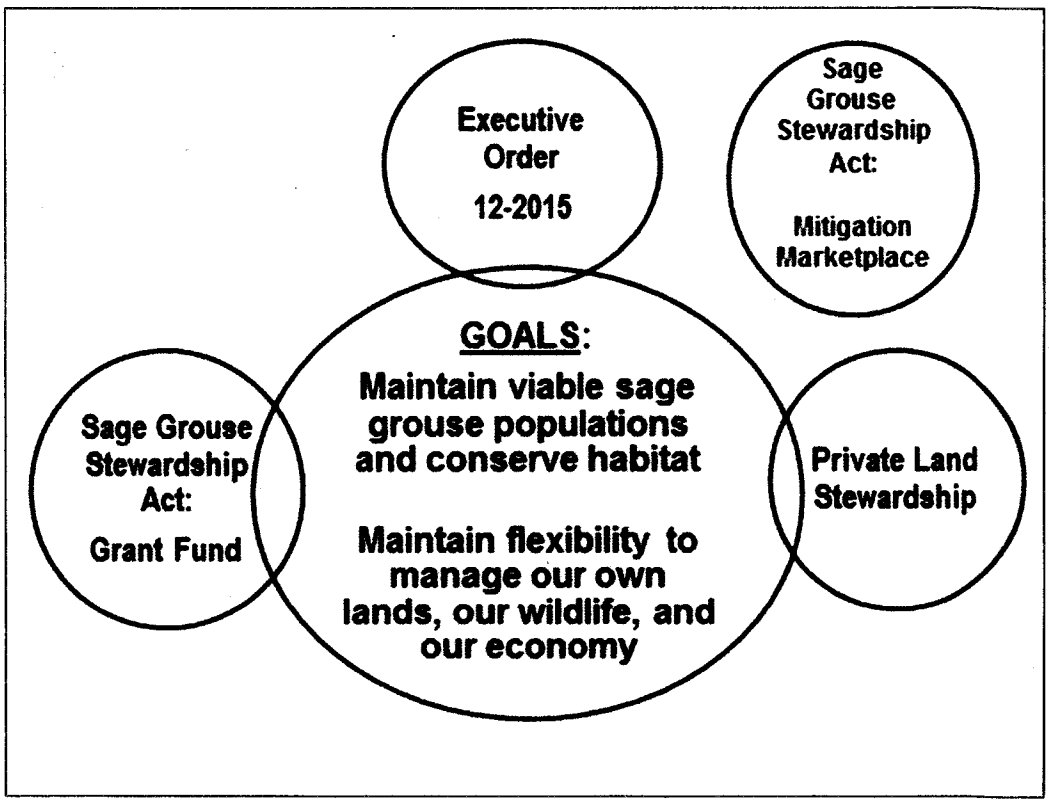

Figure 1. Components of Montana's Greater Sage Grouse Conservation Strategy.

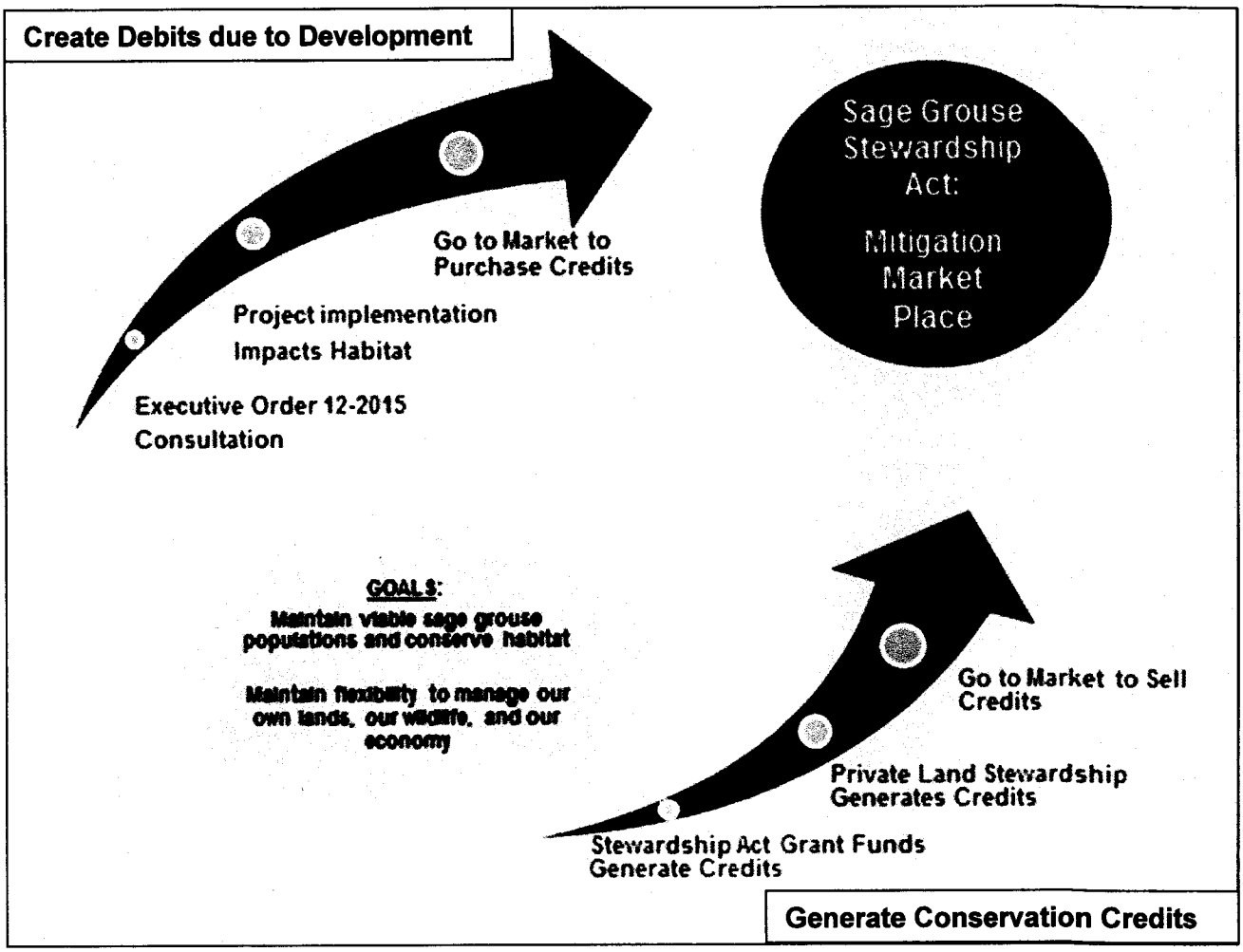

Figure 2. Relationship between Stewardship Fund Grants and Mitigation.

MITIGATION PRINCIPLES

A. Sage grouse very sensitive to habitat loss and fragmentation.

   1. Habitat loss or fragmentation is the *key* Endangered Species Act issue for Montana.
   2. Greater Sage Grouse Stewardship Act and Executive Order 12-2015 establish that Montana will require mitigation for impacts in designated sage grouse habitats: core, general, connectivity areas.

B. Mitigation addresses direct, indirect and residual impacts of development, using free markets in some cases (marketplace for ecological services similar to wetlands)

   1. Allows projects to move forward by mitigating impacts.
   2. Assures habitats are conserved.

C. Implement mitigation in sequential order (Mitigation Hierarchy).

1. Avoid Impacts to birds and habitat.
    a. Examples: delay installation until after July 15 if activity would occur within two miles of a lek; no surface occupancy within 0.6 miles of a lek.
2. Minimize Impacts to Birds and Habitat.
    a. Examples: Access the project site using a different road that is farther away from leks if access needed during breeding season; shift footprint of project; implement project within existing disturbance areas like road rights of way.
3. Restore and Reclaim Impacts to Birds and Habitat.
    a. Examples: re-vegetate after disturbance; noxious weed control; remove abandoned utility poles.
4. Compensate or replace (compensatory mitigation).
    a. Applies only when impacts remain after measures taken to avoid, minimize, and restore habitat.
    b. Use Habitat Quantification Tool (HQT) to estimate:
        i. How much ecological habitat value is lost if a project was implemented.
        ii. "Development debits."
        iii. Debit: a defined unit of trade representing the loss of resource function nor value at an impact or project site. The unit of measure is the same as that for a credit within a specific mitigation system. MCA 76-22-103(5).
    c. To fulfill compensatory mitigation requirement, go to mitigation marketplace.
        i. Conservation credits made available and "sold."
        ii. Credit: a defined unit of trade representing the accrual or attainment of resource functions or value at a proposed project site. MCA 76-22-103(4).
        iii. Development debits are "offset" by purchasing conservation credits.
        iv. Transactional.

D. If Montana's mitigation framework is approved by the U.S. Fish and Wildlife Service, developer's mitigation efforts will be recognized if sage grouse are listed under the federal Endangered Species Act in the future.

1. Important because provides clarity and predictability to developers.

E. Proactive conservation efforts can successfully address the causes of habitat loss and fragmentation (i.e. address and decrease threats to sage grouse habitat).

1. Incentivize private land conservation through Sage Grouse Stewardship Fund Grants and the mitigation framework.
2. Use Habitat Quantification Tool (HQT) to estimate:
   a. How valuable is a parcel land in meeting the needs of sage grouse?
   b. "Conservation credits."

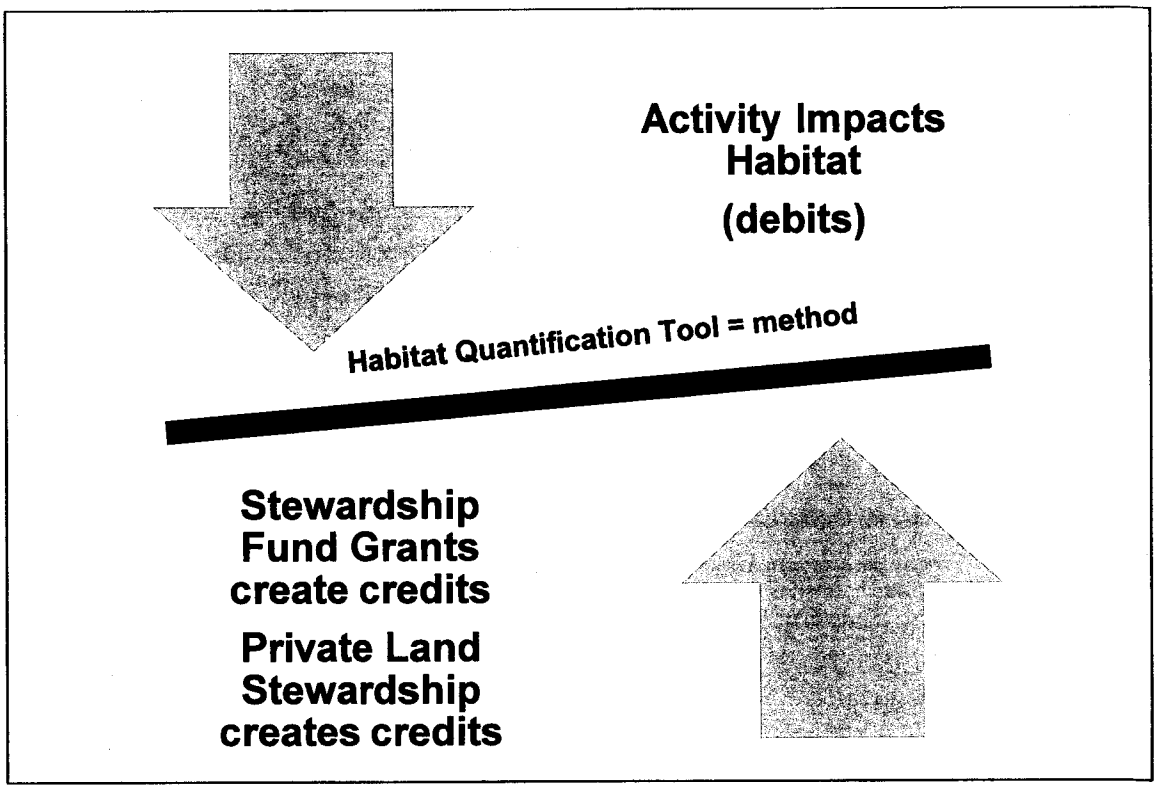

Figure 3. Habitat Quantification Tool estimates number of conservation credits and number of development debits if project is implemented, *after* avoid / minimize / reclaim or restore.

HABITAT QUANTIFICATION TOOL (HQT)

- The scientific method used to evaluate vegetation and environmental conditions related to the quality and quantity of sage grouse habitat and to quantify and calculate the value of credits and debits. MCA 76-22-103(9).
  - Estimating value of food, shelter and water in a particular area.
  - Objective process.

- Scientific / ecological value, based on vegetation and environmental conditions for a particular site:
  - Site can be dedicated to land conservation for sage grouse -- OR
  - Site can be location of development.
- Establishes the common currency in market transactions.
- Examples of vegetation and environmental variables:
  - sagebrush height and cover
  - forbs and grass cover
  - noxious weeds
  - disturbance due to development or cropland
  - riparian habitat
  - winter habitat
  - core habitat vs. general habitat?
  - Leks present? How many? Distance to closest lek?
- When estimating conservation credits using HQT, ask: how much sagebrush cover will be conserved?
- When estimating development debits using HQT, ask: how much sagebrush cover will be lost if a project is implemented?

- Independent "verifiers" certify credits actually exist and are adequately protected. Credit purchaser needs this assurance because will rely on those credits in the future.
- What to do with the results of the actual calculation is a *policy* question.

MONTANA'S STATUTORY MITIGATION FRAMEWORK

A. Conservation Bank [and/or]

1. A site or group of sites established through an agreement with the U.S. Fish and Wildlife Service to provide ecological functions and services expressed as credits that are conserved and managed for sage grouse habitat and populations and used to offset debits occurring elsewhere. MCA 76-22-103(2).
2. Credits generated from the designated conserved lands and available for sale in the market place.
3. Habitat Quantification Tool (HQT) estimates credits generated.

B. Habitat Exchange

1. A market-based system that facilitates the exchange of credits and debits between interested parties. MCA 76-22-103(8).
2. Administrator not tied to any particular parcel of land, but credits/debits are.
3. Habitat Quantification Tool (HQT) estimates credits generated.

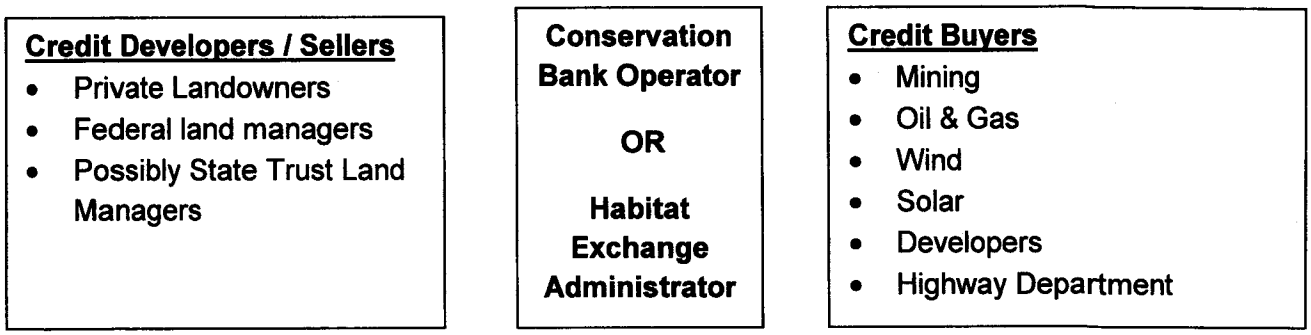

Figure 4. Generalized roles in a mitigation framework.

C. Stewardship Fund is "kick-starter" to create a pool of credits that will be available for sale.

1. Provides certainty that conservation credits will be available for sale to those who need them.
2. Provides certainty to attract private capital to invest and further develop conservation credits.
3. MSGOT's role: award funds, calculate credits retroactively and make available for sale; State is reimbursed once credits sold; State keeps ledger where credits produced and sold – but generally not a market actor.

D. Demand for credits will be determined by ability for project proponents to proactively avoid, minimize, reclaim / restore impacts of projects.

1. If still impacts, *then* compensatory mitigation required.
2. Amount required varies with type of project, project location, kind of impact, duration of impacts, etc.

E. Credits will be largely supplied by private landowners who voluntarily participate.

1. Majority of core areas where 75% of Montana's breeding males are counted is private land and State School Trust Land.
2. Revenue for participating private landowners. Develop credits and market anytime. Need not have sought Stewardship Fund dollars.